

A child's bib that includes a bead string fastener.

The present invention relates to a bib of the kind defined in the preamble of Claim 1.

5 The bib according to the invention is of the kind known in practice that comprises a thin, resilient, injection-moulded plastic element that forms a bib front piece which is intended to cover the wearer's chest in the region beneath his or her neck and which has at its lower end a collecting tray and at its upper end a recess that is placed around the child's neck. A string of material of round cross-section is fitted to and around the edge of the recess.

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It is also known in practice to connect a string to one end region of the edge of the recess and to allow the string to extend across the recess to a fastener on the upper part of the front piece in the region of the other end of the recess. The string is free-bearing and has the form of a series of beads which are mutually connected by means of waist portions.

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The fastener has the form of a keyhole opening that includes a first part whose size allows the pearls to pass through, and a radially and outwardly extending slot whose width corresponds to the diameter of the waist portions.

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One object of the invention is to provide a fastener which enables the free end portion of the string to be attached more easily and which has the form of a series of mutually joined beads and enables the free end of the string to be fastened to and released from the fastener single handed.

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Another object of the invention is to provide a fastener that minimises the risk of personal injury and that enables the holding strength of the string to be controlled within chosen limits with respect to the tension in the string.

These objects are achieved with the present invention.

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The invention is defined in the accompanying independent Claim 1.

Further embodiments of the invention will be evident from the accompanying dependent Claims.

The string bridging the neck surrounding recess has the form of a string of beads, at least at its free end. An important feature of the invention is that the fastener has the form of a body that is mounted on the front piece and that includes a generally U-shaped notch, which preferably extends parallel with the nearby free end portion of the string. The notch
5 faces away from the main surface of the body-carrying front piece and has a width corresponding to the diameter of the string. The notch includes a restraining element that is intended to be received in a waist between two mutually adjacent beads in the string. The restraining element preferably includes sections for springy and yielding engagement with the waist portions, said sections being mutually spaced apart at a distance smaller than the
10 diameter of respective waist portions and located above the level of the centre of the string resting on the bottom of the recess.

The restraining element will preferably extend around the waist portion through more than 180 degrees.

The fastener body has generally the form of a hemispherical element whose height is suitably slightly larger than the outer diameter of the string so as to enable the notch to receive the whole of the string. The body is suitably located on the side of the front piece that faces away from the wearer.

The invention will now be described by way of example with reference to the accompanying drawing, in which

Figure 1 is a front view of a child's bib constructed in accordance with the invention;

Figure 2 is a side view taken on the line II – II in Fig. 1;

Figure 3 is an enlarged view of part of the bib construction shown in Fig. 1;

Figure 4 is a sectioned view taken on the line IV – IV in Fig. 3, and

Figure 5 is a sectioned view taken on the line V – V in Fig. 1.

Shown in Fig. 1 is a bib 1 that comprises a thin injection-moulded plastic element that forms a bib front piece 2 which has at its lower end a tray-like projection 3 and at its upper end a recess 4 for placement around the child's neck.

- 5 A string of material 5 of round cross-section is fitted to and around the edge 41 of the recess 4.

Because the string 5 is comprised of a string of beads 51 that are mutually joined by waist portions 52, the string 5 will afford soft but nevertheless airy contact with the skin of the
10 wearer's neck. As will be evident from Fig. 1, the string 5 includes an extension 55 in addition to the string portion moulded around the edge of the recess 4, said extension following generally a curved path from one end 42 of the recess 4 in a free-bearing manner with a free end-portion 56 of the extension located in a part 22 of the front piece 2 situated in the proximity of the other end 43 of the edge of the recess 4. A fastener 30 for fastening
15 the end portion 56 of the string is provided in this region of the front piece 2. Provided in the upper end portion of the front piece 2 in the vicinity of the end 42 of the recess 4 is a penetrating opening 22 which enables the bib to be hung up.

The fastener 30 of the embodiment shown in Figs. 3 and 4 has the form of a generally
20 hemispherical body 31 whose curved part faces away from the front surface of the front piece 2. Extending through the body 31 is a notch 32 which has a width corresponding to the outer diameter of the beads 51 in the string 5 and a depth which corresponds generally to the diameter of said beads 51.

- 25 Provided midway along the notch 32 is a restraining element 33 which is intended to be received in a waist portion 52 and therewith secure the string against displacement along the notch 32.

As will be seen from Fig. 4, the restraining element 33 includes two mutually opposite
30 parts 34 which are mutually spaced by a distance smaller than the diameter of a respective waist portion and which are located at or above the level of the centre of the string when the beads 51 of the string extension rest on the bottom of the notch 32, such that the notch 32 and said notch parts 34 will enclose the string around an angle slightly greater than 180 degrees.

The free end part of the string has a given bending resistance, such as to enable the end part of the string to be lifted up out of the notch 32 against the holding action afforded by the parts 34. This can be achieved by lifting the end part 56 of the string through a given distance from the body 31 and/or by wedging a finger between the front piece 2 and the string portion 56 in the proximity of the body 31. It will be seen from Fig. 4 that the body 31 has a shaft which extends through a hole (not shown) in the front piece 2. There is included a conical latching element anchored (by casting) between the end of the shaft and the rear side of the front piece 2. The rounded shape of the body 31 lessens the risk of the string hooking fast. Under normal circumstances the string portion 56 can be placed easily in the notch 32, by pressing the string 56 down into the notch with the thumb of one hand while supporting against the underside of the front piece at the fastener 30 with the fingers. Because the free-bearing part 55 of the string is pre-formed to bridge the entrance to the recess 4, the bib can be placed comfortably around a child's neck single handed. When the bib has been placed around the neck of a child, the elastically resilient part of the string will assist in holding the bib in place prior to snapping the string part 56 into the fastener 30.